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6217847.pn.	1

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<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
<u>L7</u>	6217847.pn.	1	<u>L7</u>
<u>L6</u>	6020121.pn.	1	<u>L6</u>
<u>L5</u>	5650135.pn.	1	<u>L5</u>
<u>L4</u>	5900362.pn.	1	<u>L4</u>
<u>L3</u>	11 and luc	1	<u>L3</u>
<u>L2</u>	11 near10 luc	0	<u>L2</u>
<u>L1</u>	lux near5 positive	34	<u>L1</u>

END OF SEARCH HISTORY

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
 NEWS 2 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web  
 NEWS 3 Jan 29 FSTA has been reloaded and moves to weekly updates  
 NEWS 4 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update frequency  
 NEWS 5 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02  
 NEWS 6 Mar 08 Gene Names now available in BIOSIS  
 NEWS 7 Mar 22 TOXLIT no longer available  
 NEWS 8 Mar 22 TRCTHERMO no longer available  
 NEWS 9 Mar 28 US Provisional Priorities searched with P in CA/CAPLUS and USPATFULL  
 NEWS 10 Mar 28 LIPINSKI/CALC added for property searching in REGISTRY  
 NEWS 11 Apr 02 PAPERCHEM no longer available on STN. Use PAPERCHEM2 instead.  
 NEWS 12 Apr 08 "Ask CAS" for self-help around the clock  
 NEWS 13 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area  
 NEWS 14 Apr 09 ZDB will be removed from STN  
 NEWS 15 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB  
 NEWS 16 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS  
 NEWS 17 Apr 22 BIOSIS Gene Names now available in TOXCENTER  
 NEWS 18 Apr 22 Federal Research in Progress (FEDRIP) now available  
 NEWS 19 May 31 PCTFULL to be reloaded. File temporarily unavailable.

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,  
 CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
 AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002

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 NEWS WWW CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 16:36:44 ON 02 JUN 2002

=> LUX (5A) POSITIVE

LUX IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
 For a list of commands available to you in the current file, enter  
 "HELP COMMANDS" at an arrow prompt (=>).

=> FILE .ELIZ

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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0.42

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FILE 'ESBIOBASE' ENTERED AT 16:38:03 ON 02 JUN 2002  
COPYRIGHT (C) 2002 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'BIOTECHNO' ENTERED AT 16:38:03 ON 02 JUN 2002  
COPYRIGHT (C) 2002 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'WPIDS' ENTERED AT 16:38:03 ON 02 JUN 2002  
COPYRIGHT (C) 2002 THOMSON DERWENT

=> LUX (5A) POSITIVE  
LUX IS NOT A RECOGNIZED COMMAND  
The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> S LUX (5A) POSITIVE  
L1 82 LUX (5A) POSITIVE

=> S L1 AND ABCDE  
L2 0 L1 AND ABCDE

=> S L1 AND AB  
L3 0 L1 AND AB

=> DUP REM L1  
PROCESSING COMPLETED FOR L1  
L4 31 DUP REM L1 (51 DUPLICATES REMOVED)

=> D 1-10

L4 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2002 ACS

Full Text	Citing References
--------------	----------------------

AN 2002:90237 HCAPLUS  
DN 136:129939  
TI Transposable luciferase expression cassettes for Gram positive bacteria  
and their use to monitor bacterial infections by in situ bioluminescence  
IN Francis, Kevin P.; Purchio, Anthony F.  
PA Xenogen Corporation, USA  
SO PCT Int. Appl., 114 pp.  
CODEN: PIXXD2  
DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002008431	A1	20020131	WO 2001-US7324	20010307
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 2000-216257P	P	20000706		

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 31 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

Full Text	Citing References
-----------	-------------------

AN 2002:141613 BIOSIS  
DN PREV200200141613  
TI Expression of lux genes in a clinical isolate of Streptococcus pneumoniae: Using bioluminescence to monitor gemifloxacin activity.  
AU Beard, S. J.; Salisbury, V. (1); Lewis, R. J.; Sharpe, J. A.; MacGowan, A. P.  
CS (1) Faculty of Applied Sciences, University of the West of England, Coldharbour La, Bristol, BS16 1QY: [vyv.salisbury@uwe.ac.uk](mailto:vyv.salisbury@uwe.ac.uk) UK  
SO Antimicrobial Agents and Chemotherapy, (February, 2002) Vol. 46, No. 2, pp. 538-542. <http://aac.asm.org/>. print.  
ISSN: 0066-4804.  
DT Article  
LA English

L4 ANSWER 3 OF 31 MEDLINE DUPLICATE 1

Full Text	Citing References
-----------	-------------------

AN 2001248141 MEDLINE  
DN 21189254 PubMed ID: 11292758  
TI Visualizing pneumococcal infections in the lungs of live mice using bioluminescent Streptococcus pneumoniae transformed with a novel gram-positive lux transposon.  
AU Francis K P; Yu J; Bellinger-Kawahara C; Joh D; Hawkinson M J; Xiao G; Purchio T F; Caparon M G; Lipsitch M; Contag P R  
CS Xenogen Corporation, Alameda, California 94501, USA.. [kfrancis@xenogen.com](mailto:kfrancis@xenogen.com)  
SO INFECTION AND IMMUNITY, (2001 May) 69 (5) 3350-8.  
Journal code: GO7; 0246127. ISSN: 0019-9567.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200105  
ED Entered STN: 20010517  
Last Updated on STN: 20010517  
Entered Medline: 20010510

L4 ANSWER 4 OF 31 MEDLINE DUPLICATE 2

Full Text	Citing References
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AN 2001086882 MEDLINE  
DN 20566707 PubMed ID: 11114940  
TI Amino acid residues in LuxR critical for its mechanism of transcriptional activation during quorum sensing in Vibrio fischeri.  
AU Trott A E; Stevens A M  
CS Department of Biology, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061, USA.

SO JOURNAL OF BACTERIOLOGY, (2001 Jan) 183 (1) 387-92.  
 Journal code: HH3. ISSN: 0021-9193.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200101  
 ED Entered STN: 20010322  
 Last Updated on STN: 20010322  
 Entered Medline: 20010118

L4 ANSWER 5 OF 31 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

Full Text Citing  
 References

AN 2002:201403 BIOSIS  
 DN PREV200200201403  
 TI Generation of bioluminescent Gram-positive bacteria for noninvasive  
 imaging in living animals.  
 AU Francis, K. P. (1); Yu, J. (1); Bellinger-Kawahara, C. (1); Joh, D. (1);  
 Purchio, T. F. (1); Contag, P. R. (1)  
 CS (1) Xenogen Corporation, Alameda, CA USA  
 SO Abstracts of the General Meeting of the American Society for Microbiology,  
 (2001) Vol. 101, pp. 290. <http://www.asmtusa.org/mtgsrc/generalmeeting.htm>.  
 print.  
 Meeting Info.: 101st General Meeting of the American Society for  
 Microbiology Orlando, FL, USA May 20-24, 2001  
 ISSN: 1060-2011.  
 DT Conference  
 LA English

L4 ANSWER 6 OF 31 MEDLINE

DUPLICATE 3

Full Text Citing  
 References

AN 2000267863 MEDLINE  
 DN 20267863 PubMed ID: 10806366  
 TI The marine pathogen *Vibrio vulnificus* encodes a putative homologue of the  
*Vibrio harveyi* regulatory gene, luxR: a genetic and phylogenetic  
 comparison.  
 AU McDougald D; Rice S A; Kjelleberg S  
 CS School of Microbiology and Immunology, The University of New South Wales,  
 Sydney, Australia.  
 SO GENE, (2000 May 2) 248 (1-2) 213-21.  
 Journal code: FOP; 7706761. ISSN: 0378-1119.  
 CY Netherlands  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 OS GENBANK-AF204737  
 EM 200007  
 ED Entered STN: 20000714  
 Last Updated on STN: 20000714  
 Entered Medline: 20000706

L4 ANSWER 7 OF 31 MEDLINE

DUPLICATE 4

Full Text Citing  
 References

AN 97394920 MEDLINE  
 DN 97394920 PubMed ID: 9251182  
 TI Evaluation of luciferase reporter bacteriophage A511::luxAB for detection  
 of *Listeria monocytogenes* in contaminated foods.  
 AU Loessner M J; Rudolf M; Scherer S  
 CS Institut fur Mikrobiologie, Technische Universitat Munchen,  
 Freising-Weihenstephan, Germany.. [M.J.Loessner@lrz.tu-muenchen.de](mailto:M.J.Loessner@lrz.tu-muenchen.de)  
 SO APPLIED AND ENVIRONMENTAL MICROBIOLOGY, (1997 Aug) 63 (8) 2961-5.  
 Journal code: 6K6; 7605801. ISSN: 0099-2240.  
 CY United States

DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199709  
 ED Entered STN: 19970926  
 Last Updated on STN: 19970926  
 Entered Medline: 19970918

L4 ANSWER 8 OF 31 MEDLINE DUPLICATE 5

Full Text Citing  
 Text References

AN 1998086108 MEDLINE  
 DN 98086108 PubMed ID: 9426139  
 TI Characterization of hapR, a positive regulator of the Vibrio cholerae  
 HA/protease gene hap, and its identification as a functional homologue of  
 the Vibrio harveyi luxR gene.  
 AU Jobling M G; Holmes R K  
 CS Department of Microbiology, University of Colorado Health Sciences Center,  
 Denver 80262, USA.. [Michael.Jobling@UCHSC.EDU](mailto:Michael.Jobling@UCHSC.EDU)  
 NC RO1 AI31940 (NIAID)  
 SO MOLECULAR MICROBIOLOGY, (1997 Dec) 26 (5) 1023-34.  
 Journal code: MOM; 8712028. ISSN: 0950-382X.  
 CY ENGLAND: United Kingdom  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 OS GENBANK-AF000716; GENBANK-AF001009  
 EM 199803  
 ED Entered STN: 19980312  
 Last Updated on STN: 20000303  
 Entered Medline: 19980305

L4 ANSWER 9 OF 31 MEDLINE DUPLICATE 6

Full Text Citing  
 Text References

AN 95164504 MEDLINE  
 DN 95164504 PubMed ID: 7860584  
 TI Detection and quantification of Vibrio fischeri autoinducer from symbiotic  
 squid light organs.  
 AU Boettcher K J; Ruby E G  
 CS Department of Biological Sciences, University of Southern California, Los  
 Angeles 90089-0371.  
 SO JOURNAL OF BACTERIOLOGY, (1995 Feb) 177 (4) 1053-8.  
 Journal code: HH3; 2985120R. ISSN: 0021-9193.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199503  
 ED Entered STN: 19950404  
 Last Updated on STN: 19950404  
 Entered Medline: 19950317

L4 ANSWER 10 OF 31 SCISEARCH COPYRIGHT 2002 ISI (R)DUPLICATE 7

Full Text Citing  
 Text References

AN 96:35148 SCISEARCH  
 GA The Genuine Article (R) Number: TL751  
 TI AN EXTRA-LIMITAL BROAD-TAILED HUMMINGBIRD IN WINTER - DISORIENTED OR  
 HARBINGER OF CHANGE  
 AU CALDER W A (Reprint)  
 CS UNIV ARIZONA, DEPT ECOL & EVOLUT BIOL, TUCSON, AZ, 85721 (Reprint)  
 CYA USA  
 SO JOURNAL OF FIELD ORNITHOLOGY, (FAL 1995) Vol. 66, No. 4, pp. 522-530.  
 ISSN: 0273-8570.  
 DT Article; Journal

FS AGRI  
LA ENGLISH  
REC Reference Count: 22  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

=> D 3

L4 ANSWER 3 OF 31 MEDLINE DUPLICATE 1

Full Text Citing  
References

AN 2001248141 MEDLINE  
DN 21189254 PubMed ID: 11292758  
TI Visualizing pneumococcal infections in the lungs of live mice using bioluminescent Streptococcus pneumoniae transformed with a novel gram-positive lux transposon.  
AU Francis K P; Yu J; Bellinger-Kawahara C; Joh D; Hawkinson M J; Xiao G; Purchio T F; Caparon M G; Lipsitch M; Contag P R  
CS Xenogen Corporation, Alameda, California 94501, USA.. [kfrancis@xenogen.com](mailto:kfrancis@xenogen.com)  
SO INFECTION AND IMMUNITY, (2001 May) 69 (5) 3350-8.  
Journal code: G07; 0246127. ISSN: 0019-9567.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200105  
ED Entered STN: 20010517  
Last Updated on STN: 20010517  
Entered Medline: 20010510

=> D 11-20

L4 ANSWER 11 OF 31 MEDLINE DUPLICATE 8

Full Text Citing  
References

AN 94288634 MEDLINE  
DN 94288634 PubMed ID: 8017939  
TI Survival of lux-lac-marked biosurfactant-producing Pseudomonas aeruginosa UG2L in soil monitored by nonselective plating and PCR.  
AU Flemming C A; Leung K T; Lee H; Trevors J T; Greer C W  
CS Department of Environmental Biology, University of Guelph, Ontario, Canada.  
SO APPLIED AND ENVIRONMENTAL MICROBIOLOGY, (1994 May) 60 (5) 1606-13.  
Journal code: 6K6; 7605801. ISSN: 0099-2240.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199407  
ED Entered STN: 19940810  
Last Updated on STN: 19940810  
Entered Medline: 19940728

L4 ANSWER 12 OF 31 SCISEARCH COPYRIGHT 2002 ISI (R)DUPLICATE 9

Full Text Citing  
References

AN 94:626245 SCISEARCH  
GA The Genuine Article (R) Number: PJ125  
TI BIOLUMINESCENCE OF MYCTOPHID AND STOMIIFORM FISHES IS NOT DUE TO BACTERIAL LUCIFERASE  
AU HAYGOOD M G (Reprint); EDWARDS D B; MOWLDS G; ROSENBLATT R H  
CS UNIV CALIF SAN DIEGO, SCRIPPS INST OCEANOGRAPHY, DIV MARINE BIOL RES, LA JOLLA, CA, 92093 (Reprint); UNIV CALIF SAN DIEGO, SCRIPPS INST OCEANOGRAPHY, CTR MARINE BIOMED & BIOTECHNOL, LA JOLLA, CA, 92093  
CYA USA

SO JOURNAL OF EXPERIMENTAL ZOOLOGY, (01 OCT 1994) Vol. 270, No. 2, pp.  
225-231.  
ISSN: 0022-104X.  
DT Note; Journal  
FS LIFE; AGRI  
LA ENGLISH  
REC Reference Count: 23  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

L4 ANSWER 13 OF 31 LIFESCI COPYRIGHT 2002 CSA

Full  
Text

AN 93:123433 LIFESCI  
TI Response of Gambierdiscus toxicus to light: Cell physiology and toxicity.  
AU Morton, S.L.; Bomber, J.W.; Tindall, D.R.; Aikman, K.E.  
CS Dep. Plant Biol., Southern Illinois Univ., Carbondale, IL 62901, USA  
SO DEV. MAR. BIOL., (1993) pp. 541-546. ELSEVIER. AMSTERDAM (NETHERLANDS).  
Meeting Info.: 5. Int. Conf. on Toxic Marine Phytoplankton. Newport, RI  
(USA). 28 Oct 1991.  
ISBN: 0-444-89719-4.  
DT Book  
TC Conference  
FS Q1  
LA English  
SL English

L4 ANSWER 14 OF 31 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

Full  
Text

Citing  
References

AN 1991:135772 BIOSIS  
DN BA91:72312  
TI THE VIBRIO-FISCHERI LUX-R PROTEIN IS CAPABLE OF BIDIRECTIONAL STIMULATION  
OF TRANSCRIPTION AND BOTH **POSITIVE** AND NEGATIVE REGULATION OF THE  
**LUX-R** GENE.  
AU SHADEL G; BALDWIN T O  
CS DEP. BIOCHEMISTRY BIOPHYSICS, TEXAS A AND M UNIVERSITY, COLLEGE STATION,  
TEXAS 77843.  
SO J BACTERIOL, (1991) 173 (2), 568-574.  
CODEN: JOBAAY. ISSN: 0021-9193.  
FS BA; OLD  
LA English

L4 ANSWER 15 OF 31 SCISEARCH COPYRIGHT 2002 ISI (R)DUPLICATE 10

Full  
Text

Citing  
References

AN 91:392243 SCISEARCH  
GA The Genuine Article (R) Number: FV721  
TI MECHANISMS OF EMBRYONIC DRIFT IN THE AMPHIDROMOUS GOBY,  
RHINOBOBIUS-BRUNNEUS  
AU IGUCHI K I (Reprint); MIZUNO N  
CS NATL RES INST FISHERIES SCI, 1088 KOMAKI, UEDA, NAGANO 386, JAPAN  
(Reprint); EHIME UNIV, FAC SCI, DEPT BIOL, MATSUYAMA, EHIME 790, JAPAN  
CYA JAPAN  
SO ENVIRONMENTAL BIOLOGY OF FISHES, (1991) Vol. 31, No. 3, pp. 295-300.  
DT Note; Journal  
FS AGRI  
LA ENGLISH  
REC Reference Count: 18  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

L4 ANSWER 16 OF 31 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

Full  
Text

Citing  
References

AN 1989:426389 BIOSIS  
DN BA88:84647  
TI IDENTIFICATION OF THE OPERATOR OF THE LUX REGULON FROM THE VIBRIO-FISCHERI



STRAIN ATCC-7744.

AU DEVINE J H; SHADEL G S; BALDWIN T O  
 CS DEP. BIOCHEM. AND BIOPHYSICS, TEX. A AND M UNIV., COLLEGE STATION, TEX.  
 77843.  
 SO PROC NATL ACAD SCI U S A, (1989) 86 (15), 5688-5692.  
 CODEN: PNASA6. ISSN: 0027-8424.  
 FS BA; OLD  
 LA English

L4 ANSWER 17 OF 31 WPIDS (C) 2002 THOMSON DERWENT

Full  
Text

AN 1987-287684 [41] WPIDS  
 DNN N1987-215332 DNC C1987-122208  
 TI Positively and negatively chargeable electrophotographic photoreceptor -  
 has photoconductive layer contg. zinc oxide, acidic dye sensitiser,  
 organic resinous binder and di amino cpd. with benzyl gps..  
 DC A89 E14 E24 G08 P84 S06  
 PA (TOMO) TOMOEGAWA PAPER MFG CO LTD  
 CYC 1  
 PI JP 62200360 A 19870904 (198741)\* 6p  
 JP 04029055 B 19920515 (199224) 7p G03G005-05  
 ADT JP 62200360 A JP 1986-41604 19860228; JP 04029055 B JP 1986-41604 19860228  
 FDT JP 04029055 B Based on JP 62200360  
 PRAI JP 1986-41604 19860228  
 IC ICM G03G005-05  
 ICS G03G005-06; G03G005-08

L4 ANSWER 18 OF 31 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

Full  
TextCiting  
References

AN 1987:221226 BIOSIS  
 DN BR32:107100  
 TI OVERPRODUCTION AND PURIFICATION OF **LUX** RECEPTOR PROTEIN THE **POSITIVE**  
 REGULATORY ELEMENT OF VIBRIO-FISCHERI LUMINESCENCE.  
 AU KAPLAN H B; GREENBERG E P  
 CS CORNELL UNIV., ITHACA, N.Y.  
 SO 87TH ANNUAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY, ATLANTA,  
 GEORGIA, USA, MARCH 1-6, 1987. ABSTR ANNU MEET AM SOC MICROBIOL. (1987) 87  
 (0), 169.  
 CODEN: ASMACK. ISSN: 0094-8519.  
 DT Conference  
 FS BR; OLD  
 LA English

L4 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2002 ACS

Full  
TextCiting  
References

AN 1985:15049 HCAPLUS  
 DN 102:15049  
 TI Electrophotographic photoreceptor  
 PA Tomoegawa Paper Mfg. Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59116662	A2	19840705	JP 1982-224894	19821223
JP 63057780	B4	19881114		
US 4539282	A	19850903	US 1983-563437	19831220
EP 115198	A1	19840808	EP 1983-307944	19831223
EP 115198	B1	19870311		
R: CH, DE, FR, GB, IT, LI, NL				
CA 1211976	A1	19860930	CA 1983-444184	19831223

PRAI JP 1982-224894

19821223

L4 ANSWER 20 OF 31 WPIDS (C) 2002 THOMSON DERWENT

Full  
Text

AN 1984-061643 [10] WPIDS

DNN N1984-046494

TI Fish attraction light system - improves attraction of fish with unstable positive reaction to light by using a light source of 100-0,01 lux.

DC P14

IN EGOROV, V G; PROTASOV, V R; PYATNITSKI, I I

PA (PYAT-I) PYATNITSKII I I

CYC 1

PI SU 1017247 A 19830515 (198410)\* 2p

ADT SU 1017247 A SU 1980-3002603 19800915

PRAI SU 1980-3002603 19800915

IC A01K075-02

=> D 21-31

L4 ANSWER 21 OF 31 LIFESCI COPYRIGHT 2002 CSA

Full  
Text

AN 83:42247 LIFESCI

TI Changes in phototaxis during early development of walleye.

AU Bulkowski, L.; Meade, J.W.

CS Natl. Fishery Res. & Dev. Lab., U.S. Fish & Wildl. Serv., Rural Delivery 4, Box 63, Wellsboro, PA 16901, USA

SO TRANS. AM. FISH. SOC., (1983) vol. 112, no. 3, pp. 445-447.

DT Journal

FS Y

LA English

SL English

L4 ANSWER 22 OF 31 WPIDS (C) 2002 THOMSON DERWENT

Full  
Text

AN 1983-763616 [37] WPIDS

DNN N1983-163214 DNC C1983-088798

TI Photoconductivity sensitiser for poly-9-vinyl-carbazole - involves using 9-methyl-fluoro-acridine(s), to extend range of sensitisers that can be used.

DC A14 A89 E13 G08 P84 S06 U11

IN BABUSHKIN, V A; KUROV, G N; SMIRNOV, V I

PA (ASII) AS SIBE IRKUT ORG CHEM

CYC 1

PI SU 972468 A 19821107 (198337)\* 5p

PRAI SU 1981-3296469 19810528

IC G03G005-06

L4 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2002 ACS

Full  
Text

Citing  
References

AN 1975:105201 HCAPLUS

DN 82:105201

TI Sensitive plates for electrophotography

PA Rank-Xerox Ltd.

SO Brit., 4 pp.

CODEN: BRXXAA

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1366107	A	19740911	GB 1971-50257	19711028

JP 49015221 B4 19740413 JP 1970-96216 19701031  
PRAI JP 1970-96216 19701031

L4 ANSWER 24 OF 31 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

Full Citing  
Text References

AN 75044718 EMBASE  
DN 1975044718  
TI Behavior in different environments of populations of *Drosophila pseudoobscura* selected for phototaxis and geotaxis.  
AU Dobzhansky T.; Judson C.L.; Pavlovsky O.  
CS Dept. Genet. Entomol., Univ. California, Davis, Calif. 95616, United States  
SO Proceedings of the National Academy of Sciences of the United States of America, (1974) 71/5 (1974-1976).  
CODEN: PNASA6  
DT Journal  
FS 022 Human Genetics  
LA English

L4 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2002 ACS

Full Citing  
Text References

AN 1969:410443 HCAPLUS  
DN 71:10443  
TI Effect of phosphorus feeding conditions on photosynthesis by apple trees  
AU Lebedev, V. M.  
CS Michurin. Plodoovoshch. Inst., Michurinsk, USSR  
SO Biol. Nauki (1969), (3), 93-7  
CODEN: BINKBT  
DT Journal  
LA Russian

L4 ANSWER 26 OF 31 HCAPLUS COPYRIGHT 2002 ACS

Full Citing  
Text References

AN 1969:52176 HCAPLUS  
DN 70:52176  
TI Positive and negative photoconductivity in infrared irradiation of cadmium sulfide  
AU Vateva, El.; Todorov, G.; Kamenova, M.  
CS Inst. Phys., Sofia, Bulg.  
SO Dokl. Bolg. Akad. Nauk (1968), 21(11), 1165-8  
CODEN: DBANAD  
DT Journal  
LA English

L4 ANSWER 27 OF 31 HCAPLUS COPYRIGHT 2002 ACS

Full Citing  
Text References

AN 1966:409213 HCAPLUS  
DN 65:9213  
OREF 65:1667g-h,1668a  
TI Electrophotographic process  
PA Katsuragawa Denki Kabushiki Kaisha  
SO 32 pp.  
DT Patent  
LA Unavailable

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI NL 65009608		19660126	NL	
PRAI JP		19640725		

L4 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2002 ACS

Full Text	Citing References
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AN 1963:464109 HCAPLUS  
 DN 59:64109  
 OREF 59:11884b-d  
 TI The effect of naphthylphthalamic acid on stimulus perception in the I and 2 positive and the 1 negative phototropic and the geotropic reactions of Avena coleoptiles  
 AU Libbert, E.; Steyer, B.  
 CS Univ. Rostock, Germany  
 SO Naturwissenschaften (1963), 50(7), 576  
 DT Journal  
 LA Unavailable

L4 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2002 ACS

Full Text	Citing References
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AN 1953:71559 HCAPLUS  
 DN 47:71559  
 OREF 47:12068i,12069a  
 TI Production of photographic images on selenium by crystallization under the influence of light  
 AU Selenyi, P.  
 CS Roland Eotvos Univ., Budapest  
 SO Acta Phys. Acad. Sci. Hung. (1952), 2, 129-39  
 DT Journal  
 LA German

L4 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2002 ACS

Full Text	Citing References
--------------	----------------------

AN 1951:59065 HCAPLUS  
 DN 45:59065  
 OREF 45:10043e-i,10044a-f  
 TI Structure and particularities of the operation of silver sulfide photocells  
 AU Potapenko, I. R.  
 CS Phys. Inst., Acad. Sci. Ukr. S.S.R., Kiev  
 SO Zhur. Tekh. Fiz. (1948), 18, 1356-68  
 DT Journal  
 LA Unavailable

L4 ANSWER 31 OF 31 HCAPLUS COPYRIGHT 2002 ACS

Full Text	Citing References
--------------	----------------------

AN 1936:7483 HCAPLUS  
 DN 30:7483  
 OREF 30:967h-i,968a  
 TI Photoelectric cells with barrier film artificially deposited  
 AU van Geel, W. Ch.; de Boer, J. H.  
 SO Physica (1935), 2, 892-900  
 DT Journal  
 LA Unavailable

=> DIS HIS

(FILE 'HOME' ENTERED AT 16:36:44 ON 02 JUN 2002)

FILE 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS, ESBIODBASE, BIOTECHNO, WPIDS' ENTERED AT 16:38:03 ON 02 JUN 2002

L1 82 S LUX (5A) POSITIVE  
 L2 0 S L1 AND ABCDE  
 L3 0 S L1 AND AB  
 L4 31 DUP REM L1 (51 DUPLICATES REMOVED)

=> S LUX (10A) LUC  
L5 52 LUX (10A) LUC

=> S LUXA (3A) LUXB (SA) LUC  
MISSING OPERATOR 'LUXB (SA)  
The search profile that was entered contains terms or  
nested terms that are not separated by a logical operator.

=> S LUXA (3A) LUXB(3A) LUC  
L6 0 LUXA (3A) LUXB(3A) LUC

=> S LUXA AND LUXB AND LUC  
L7 7 LUXA AND LUXB AND LUC

=> DUP REM L7  
PROCESSING COMPLETED FOR L7  
L8 7 DUP REM L7 (0 DUPLICATES REMOVED)

=> D 1-7

L8 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2002 ACS

Full Citing  
Text References

AN 2002:90237 HCAPLUS  
DN 136:129939  
TI Transposable luciferase expression cassettes for Gram positive bacteria  
and their use to monitor bacterial infections by in situ bioluminescence  
IN Francis, Kevin P.; Purchio, Anthony F.  
PA Xenogen Corporation, USA  
SO PCT Int. Appl., 114 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002008431	A1	20020131	WO 2001-US7324	20010307
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p> <p>RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG</p>				

PRAI US 2000-216257P P 20000706  
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 7 WPIDS (C) 2002 THOMSON DERWENT

Full  
Text

AN 2001-226744 [23] WPIDS  
DNC C2001-067719  
TI Luciferase expression cassettes for conferring bioluminescence on  
gram-positive bacteria, has polynucleotide encoding luciferase gene  
products and gram-positive Shine-Dalgarno sequences upstream of  
polynucleotide.  
DC B04 C06 D16  
IN CONTAG, P R; FRANCIS, K P; JOH, D J  
PA (XENO-N) XENOGEN CORP  
CYC 93  
PI WO 2001018195 A2 20010315 (200123)\* EN 73p C12N015-00  
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ

NL OA PT SD SE SL SZ TZ UG ZW  
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM  
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2000071266 A 20010410 (200137) C12N015-00  
ADT WO 2001018195 A2 WO 2000-US24699 20000907; AU 2000071266 A AU 2000-71266  
20000907  
FDT AU 2000071266 A Based on WO 200118195  
PRAI US 1999-152904P 19990908  
IC ICM C12N015-00

L8 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2002 ACS

Full Citing  
Text References

AN 1996:172487 HCAPLUS  
DN 124:222083  
TI Comparison of Vibrio and firefly luciferases as reporter gene systems for  
use in bacteria and plants  
AU Mudge, Stephen R.; Lewis-Henderson, Wendy R.; Birch, Robert G.  
CS Department Botany, University Queensland, 4072, Australia  
SO Aust. J. Plant Physiol. (1996), 23(1), 75-85  
CODEN: AJPPCH; ISSN: 0310-7841  
DT Journal  
LA English

L8 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2002 ACS

Full Citing  
Text References

AN 1996:651239 HCAPLUS  
DN 125:294255  
TI Chloramphenicol acetyl-transferase, firefly and bacterial luciferases as  
reporter genes in transfection of mammalian cells  
AU Gelmini, S.; Pinzani, P.; Orlando, C.; Sestini, R.; Baldwin, T. O.;  
Pazzagli, M.  
CS Clinical Biochemistry Unit, University Florence, Italy  
SO Biolumin. Chemilumin., Proc. Int. Symp., 7th (1993), 200-206. Editor(s):  
Szalay, Aladar A.; Kricka, Larry J.; Stanley, Philip E. Publisher: Wiley,  
Chichester, UK.  
CODEN: 63MLAK  
DT Conference  
LA English

L8 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2002 ACS

Full Citing  
Text References

AN 1996:651220 HCAPLUS  
DN 125:319192  
TI Baculovirus-mediated expression of bacterial and beetle luciferases in  
insect cells  
AU Saviranta, Petri; Oker-Blom, Christian; Karp, Matti  
CS Department Biochemistry, University Turku, Turku, Finland  
SO Biolumin. Chemilumin., Proc. Int. Symp., 7th (1993), 94-98. Editor(s):  
Szalay, Aladar A.; Kricka, Larry J.; Stanley, Philip E. Publisher: Wiley,  
Chichester, UK.  
CODEN: 63MLAK  
DT Conference  
LA English

L8 ANSWER 6 OF 7 BIOTECHDS COPYRIGHT 2002 THOMSON DERWENT AND ISI

Full  
Text

AN 1992-09556 BIOTECHDS  
TI Expression of luciferase genes from different origins in Bacillus  
subtilis;  
cloning using plasmid pCSS119, plasmid pCSS810 and plasmid pCSS962

vector  
 AU Lampinen J; Koivisto L; Wahlsten M; Mantsala P; \*Karp M  
 LO Centre for Biotechnology, P.O. Box 123, 20521 Turku, Finland.  
 SO Mol.Gen.Genet.; (1992) 232, 3, 498-504  
 CODEN: MGGEAE  
 DT Journal  
 LA English

L8 ANSWER 7 OF 7 BIOTECHDS COPYRIGHT 2002 THOMSON DERWENT AND ISI

Full  
Text

AN 1988-05416 BIOTECHDS  
 TI Visualizing gene expression with luciferase fusions;  
 selectable marker for gene expression visualization  
 AU Schauer A T  
 LO Department of Microbiology, University of Texas, Austin, TX 78712-1095,  
 USA.  
 SO Trends Biotechnol.; (1988) 6, 1, 23-27  
 DT Journal  
 LA English

=> D 3-7 KWIC

L8 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2002 ACS

Citing  
References

AB Luciferase genes from *Vibrio harveyi* (*luxAB*) and firefly (*luc*) were introduced into *E. coli*, *Agrobacterium*, *Arabidopsis* and tobacco. Transformed bacteria and plants were quant. assayed for luciferase activity using a range of in vitro and in vivo assay conditions. Both *lux* and *luc* proved efficient reporter genes in bacteria, although it is important to be aware that the sensitive assays may detect expression. . serious limitations to application of the *lux* system for sensitive, non-toxic assays of reporter gene expression in plants. In contrast, *LUC* activity was readily detectable in intact tissues of all plants with *luc* expression detectable by luminometer assays on cell exts. Image intensities of *luc*-expressing leaves were commonly two to four orders of magnitude above controls under the CCD camera. Provided adequate penetration of the substrate luciferin is obtained, *luc* is suitable for applications requiring sensitive, non-toxic assays of reporter gene expression in plants.

IT Gene, animal  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (*luc*, comparison of *Vibrio* and firefly luciferases as reporter gene systems for use in bacteria and plants)

IT Gene, microbial  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (*luxA*, comparison of *Vibrio* and firefly luciferases as reporter gene systems for use in bacteria and plants)

IT Gene, microbial  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (*luxB*, comparison of *Vibrio* and firefly luciferases as reporter gene systems for use in bacteria and plants)

IT Gene, microbial  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (*luxB*, comparison of *Vibrio* and firefly luciferases as reporter gene systems for use in bacteria and plants)

L8 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2002 ACS

Citing  
References

- AB . . . . were transfected with constructs contg. the glucocorticoid-inducible promoter of mouse mammary tumor virus with reporter genes CAT (encoding chloramphenicol acetyltransferase), **luc** (encoding luciferase from *Photinus pyralis*), or a fused **luxAB** (encoding A and B subunits of luciferase from *Vibrio harveyi*). The . . .
- ST gene **luc** CAT **luxAB** reporter transfection; mammal cell transfection reporter gene; *Vibrio* luciferase mammal cell transfection reporter; firefly luciferase mammal cell transfection. . .
- IT Gene, animal  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(**luc**, chloramphenicol acetyl-transferase and firefly and bacterial luciferases as reporter genes in transfection of mammalian cells)
- IT Gene, microbial  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(**luxA**, chloramphenicol acetyl-transferase and firefly and bacterial luciferases as reporter genes in transfection of mammalian cells)
- IT Gene, microbial  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(**luxB**, chloramphenicol acetyl-transferase and firefly and bacterial luciferases as reporter genes in transfection of mammalian cells)

L8 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2002 ACS

Citing  
References

- AB The **luc** genes from *Photinus pyralis* and *Pyrophorus plagiophthalmus* and 2 fusion-**lux** genes from *Vibrio Harveyi* were expressed in Sf9 cells using. .
- ST baculovirus luciferase bacteria beetle Sf9 cell; *Pyrophorus* luciferase baculovirus Sf9 cell; *Photinus* luciferase baculovirus Sf9 cell; gene **luc** **lux** baculovirus insect cell
- IT *Photinus pyralis*  
*Pyrophorus plagiophthalmus*  
(**luc** gene of; baculovirus-mediated expression of bacterial and beetle luciferases in insect cells)
- IT Gene, animal  
RL: BPR (Biological process); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
(**luc**, baculovirus-mediated expression of bacterial and beetle luciferases in insect cells)
- IT Gene, microbial  
RL: BPR (Biological process); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
(**luxA**, fusion with **luxB**; baculovirus-mediated expression of bacterial and beetle luciferases in insect cells)
- IT Gene, microbial  
RL: BPR (Biological process); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
(**luxB**, fusion with **luxA**; baculovirus-mediated expression of bacterial and beetle luciferases in insect cells)
- IT Gene, microbial  
RL: BPR (Biological process); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
(**luxB**, fusion with **luxA**; baculovirus-mediated expression of bacterial and beetle luciferases in insect cells)

L8 ANSWER 6 OF 7 BIOTECHDS COPYRIGHT 2002 THOMSON DERWENT AND ISI

AB A group of 3 vectors for luciferase expression in *Bacillus subtilis* was



constructed. *Vibrio harveyi* luciferase (EC-1.14.14.3) **luxA** and **luxB** genes, the firefly (*Photinus pyralis*) luciferase (EC-1.13.12.7) **luc** gene and 1 of the 4 click beetle (*Pyrophorus pyralis*) luciferase **lucGR** genes were inserted under the control of regulatory. . .

L8 ANSWER 7 OF 7 BIOTECHDS COPYRIGHT 2002 THOMSON DERWENT AND ISI  
 AB. . . their host the ability to glow in the dark, i.e. bacterial luciferases composed of 2 peptide subunits encoded by the **luxA** and **luxB** genes, and firefly luciferase comprising a single polypeptide encoded by the **luc** gene. The 2 types of enzyme catalyze different reactions. The prokaryotic enzyme oxidizes a long chain aldehyde with energy transfer. . .

=> DIS HIS

(FILE 'HOME' ENTERED AT 16:36:44 ON 02 JUN 2002)

FILE 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS, ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 16:38:03 ON 02 JUN 2002

L1 82 S LUX (5A) POSITIVE  
 L2 0 S L1 AND ABCDE  
 L3 0 S L1 AND AB  
 L4 31 DUP REM L1 (51 DUPLICATES REMOVED)  
 L5 52 S LUX (10A) LUC  
 L6 0 S LUXA (3A) LUXB (3A) LUC  
 L7 7 S LUXA AND LUXB AND LUC  
 L8 7 DUP REM L7 (0 DUPLICATES REMOVED)

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FILE LAST UPDATED: 31 May 2002 (20020531/ED)

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=> s vellanoweth, ?/au  
L1 14 VELLANOWETH, ?/AU

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667718 PY=1992  
L2 1 L1 AND PY=1992

=> d

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

	Full Text	Citing References
AN	1992:423075	CAPLUS
DN	117:23075	
TI	The influence of ribosome-binding-site elements on translational efficiency in <i>Bacillus subtilis</i> and <i>Escherichia coli</i> in vivo	
AU	Vellanoweth, Robert Luis; Rabinowitz, Jesse C.	
CS	Dep. Mol. Cell Biol., Univ. California, Berkeley, CA, 94720, USA	
SO	Mol. Microbiol. (1992), 6(9), 1105-14	
	CODEN: MOMIEE; ISSN: 0950-382X	
DT	Journal	
LA	English	

=> d ab

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

	Citing References
AB	A method is described to det. simultaneously the effect of any changes in the ribosome-binding site (RBS) of mRNA on translational efficiency in <i>Bacillus subtilis</i> and <i>Escherichia coli</i> in vivo. The approach was used to analyze systematically the influence of spacing between the Shine-Dalgarno sequence and the initiation codon, the three different initiation codons, and RBS secondary structure on translational yields in the two organisms. Both <i>B. subtilis</i> and <i>E. coli</i> exhibited similar spacing optima of 7-9 nucleotides. However, <i>B. subtilis</i> translated messages with spacings shorter than optimal much less efficiently than <i>E. coli</i> . In both organisms, AUG was the preferred initiation codon by two- to threefold. In <i>E. coli</i> GUG was slightly better than UUG while in <i>B. subtilis</i> UUG was better than GUG. The degree of emphasis placed on initiation codon type, as measured by translational yield, was dependent on the strength of the Shine-Dalgarno interaction in both organisms. <i>B. subtilis</i> was also much less able to tolerate secondary structure in the RBS than <i>E. coli</i> . While significant differences were found between the two organisms in the effect of specific RBS elements on translation, other mRNA components in addn. to those elements tested appear to be responsible, in part, for translational species specificity. The approach described provides a rapid and systematic means of elucidating such addnl. determinants.

=> D L8 7

L8 ANSWER 7 OF 7 BIOTECHDS COPYRIGHT 2002 THOMSON DERWENT AND ISI

Full  
Text

AN 1988-05416 BIOTECHDS

TI Visualizing gene expression with luciferase fusions;  
selectable marker for gene expression visualization

AU Schauer A T

LO Department of Microbiology, University of Texas, Austin, TX 78712-1095,  
USA.

SO Trends Biotechnol.; (1988) 6, 1, 23-27

DT Journal

LA English

L8 ANSWER 7 OF 7 BIOTECHDS COPYRIGHT 2002 THOMSON DERWENT AND ISI  
AB

A new set of selectable marker genes is greatly extending the power of recombinant DNA technology by providing a vast increase in sensitivity, simplicity and spatial resolution of gene expression. Genes have been cloned which confer on their host the ability to glow in the dark, i.e. bacterial luciferases composed of 2 peptide subunits encoded by the *luxA* and *luxB* genes, and firefly luciferase comprising a single polypeptide encoded by the *luc* gene. The 2 types of enzyme catalyze different reactions. The prokaryotic enzyme oxidizes a long chain aldehyde with energy transfer from FMNH<sub>2</sub>, whilst the firefly enzyme couples the oxidation of a heterocyclic carboxylic acid with energy transfer from ATP. Both substrates are commercially available and can be supplied exogenously. For use of the *lux* system as a marker, the promoter region of interest is inserted into a vector at 1 of the restriction sites in the polylinker, just downstream of the promoterless *luxAB* cassette and optional, promoterless, drug resistance determinant. Fusions to both sets of gene, spatial analysis and future prospects are considered. (26 ref)

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